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# Acute Coronary Syndromes

## THE MEANING OF Q WAVE ON ELECTROCARDIOGRAM AT THE PRESENTATION OF ST SEGMENT ELEVATED MYOCARDIAL INFARCTION

ACC Moderated Poster Contributions
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**Background:** The aim of this study was to evaluate clinical impact of the presence of Q wave on ECG in patients with ST-segment elevated myocardial infarction (STEMI) undergoing primary angioplasty.

**Methods:** From April 2005 to September 2009, 184 consecutive STEMI patients who visited hospital within 12 hours after chest pain onset and performing PCI were enrolled. The patients were divided according to the presence of Q waves on baseline ECG (Group 1, n=75) and without it (Group 2, n=109). Left ventricular remodeling pattern was assessed between two groups by Echocardiography at 1 year. And, major adverse cardiac events (MACE) such as cardiac death, myocardial infarction(MI), target lesion revascularization (TLR), target vessel revascularization (TVR) were evaluated at 2years.

**Results:** Baseline characteristics were not different between two groups. Time window from chest pain onset to reperfusion and infarction location were not significantly different. Left ventricular remodeling pattern by Left ventricular end-diastolic volume (LVEDV) was higher in Group 1 ( 47.9%) than group 2 (24.5%, p=0.009). Mean follow-up duration was 697±183 days. Cumulative MACE for 2 years was higher in group 1 (32.1%) than group 2 ( 13.3%, p=0.005 ). Independent risk factors for MACE were the presence of Q waves (p=0.008, Odds ratio 2.9, C.I. 1.339 to 6.648) and no reflow phenomenon (p=0.014, Odds ratio 2.874, C.I. 1.23 to 6.69).

**Conclusions:** The presence of baseline Q waves in STEMI patients with primary PCI provide an independent prognostic marker of clinical outcomes and Left ventricular remodeling.